VITA's IT Infrastructure Project

Fred Duball, SMO Director &
Steve Marzolf, ISP Manager

October 3, 2006

expect the best

The Case for Change

- **Inadequate Security and Back-Up**
  - Overlapping, redundant networks, no comprehensive cyber attack detection/reaction
  - 100+ data center 100 locations, many inadequate
  - Many mission-critical systems lack adequate disaster recovery
- **Costly Inefficiencies**
  - 3,000+ servers, used to only about 1/4 of total capacity
  - Antiquated support for some 60,000 desktops & laptops
  - Current "stovepipe" IT environment makes collaboration difficult, expensive
- **Lack of Capabilities**
  - 70+help desks, lack of basic problem diagnosis/response tools
  - Some agencies lack basic office automation tools

The Power of Partnership

- VITA provides:
  - Critical mass of current IT operations
  - Buying power of 90+ agencies
  - Experienced IT support staff
- Northrop Grumman brings:
  - $272 million in up-front capital
  - World-class IT expertise
  - Additional IT operations volume
  - Compatible corporate culture
  - Commitment to staff value

Partnership Goals

- Modernize and standardize aging IT Infrastructure
- Provide basic IT services to all state agencies at consistent service levels and predictable costs
- Improve the IT services that support the state's workforce
- Ensure the security of state assets
- Provide career opportunities for IT employees
- Enhance economic development
- Reduce costs over the long-term

Enterprise Solutions Centers

- Tier III primary data centers in eastern and southwestern Virginia
- Primary and back-up operations
- Primary and secondary Security Operations Center

Chesterfield, Virginia

Lebanon, Virginia

Enterprise Security Operations Center

- Physical and cyber-security
- Real-time, pro-active monitoring, assessing and analyzing the security posture of the state's IT infrastructure
- Centralized Security Incident Response Center (CSRIC) for active incidents
- ESOC at Southwest facility
- CSRIC at Chesterfield facility
- Both teams cross-trained for back-up

Network Infrastructure

- IT Modernization includes backbone statewide telecommunications network
- Network can support an infinite number of other applications
- Current partnership includes cost of core improvements
- Several applications, including next generation E-911, require expansion of the new infrastructure to each locality

VITA/NGC Planned PoP Locations
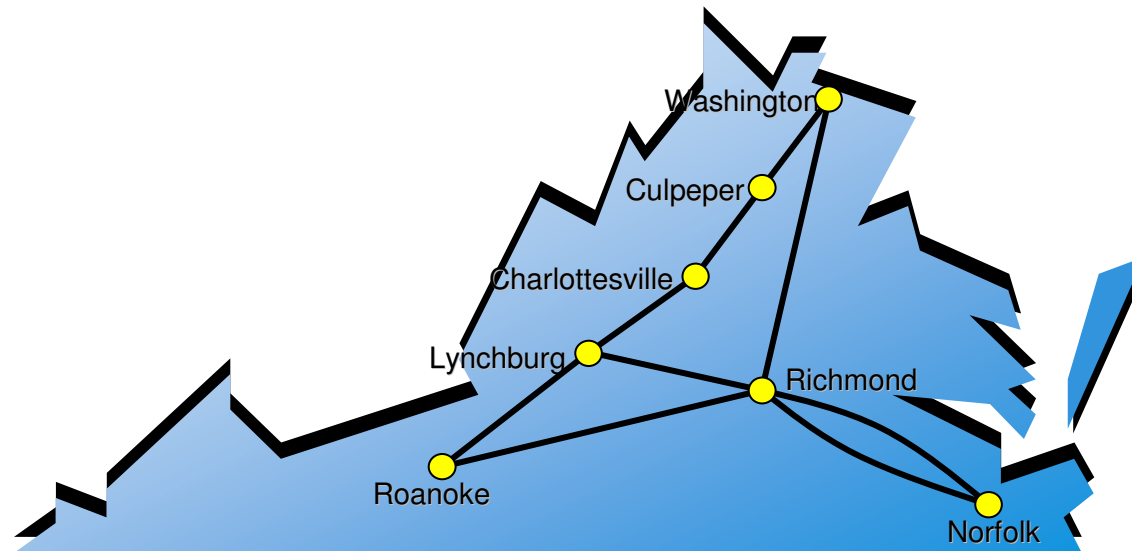
- No single point of failure in core – fault tolerant
- Designed to core availability >99.999%
- End-to-end CoS for real time applications
- OC48 trunks and scales to OC-192c
- Covers all 7 major LATAs

Radio Interoperability

- Most solutions utilize VoIP to interconnect radio systems for interoperability
- Backbone is necessary is provide connectivity between localities and state agencies
- New network infrastructure can provide this connectivity if expanded to localities
- PSAP communications as well as radio system "patching"

Next Generation E-911

- Current E-911 system is stove-pipe and unable to meet needs of new technology

- Need to migrate from circuit to packet switched technology

- A complete upgrade to the E-911 network to a shared IP network

- Opportunities for greater economies of scale for E-911 operations and survivability

Other Opportunities

- Statewide/enterprise GIS
  - Common data format to allow sharing data
  - Provides vast amounts of new data
- Hosted PSAP Services
  - Centralized "backroom" equipment linked to PSAP using the statewide network
  - Leverages economy of scale, but allows autonomous local operations
  - Improved interoperability
  - Improved services

Other Opportunities (Continued)

- Convergence of Wireline/Wireless Networks
  - Can brings leverage where local usage is insufficient to support investment
  - Working with existing carriers and utilities to achieve strong business cases
- Experience with Public Safety Projects
  - Northrop Grumman has several current projects in the Commonwealth

Bottom Line

VITA/NG partnership provides:

- Essential up-front capital, not otherwise available
- Transformed IT environment with ongoing refreshes
- Improved security of state assets
- Improved disaster recovery
- A partner for Public Safety in the delivery of services

For More Information on VITA

www.vita.virginia.gov

Fred Duball

Service Management Organization (SMO) Director

(804) 343-9026

fred.duball@vita.virginia.gov

Steve Marzolf

Integrated Services Program Manager

(804) 371-0015

steve.marzolf@vita.virginia.gov